U.S.S.N.: 10/068,299

Page 2 of 20

Amendments to the Claims

This listing of the claims will replace all prior versions and listings of the claims in the

application.

Listing of Claims

1-28. (Canceled)

29. (Currently amended) A cell suspension produced according to a method comprising the

steps of:

(a) physically and/or chemically dissociating cellular stratum in a dermal-epithelial skin

tissue sample obtained from a patient to provide cells suitable for grafting to the patient, wherein

the skin tissue sample comprises dermis, epidermis, and a dermal-epidermal junction

therebetween;

(b) harvesting [[the]] cells from the dermis and the epidermis in the presence of a

nutrient solution, the harvested cells having the potential to include cellular congregates; and

(c) filtering the cells in nutrient solution to remove cellular congregates greater than 200

μM,

wherein the resulting cell suspension is free of serum xenogenic to said patient and of

cellular congregates greater than 200 µM, and

wherein the resulting cell suspension comprises a composition of viable cells autologous

to said patient, and wherein said composition has a ratio of a cell population comprising

keratinocyte basal cells, melanocytes and fibroblasts that is, the cell population of the

composition and the skin tissue sample being comparable to a ratio of keratinocyte basal cells,

fibroblasts and melanocytes present in said tissue sample.

30-33. (Canceled)

34. (Withdrawn) A cell suspension according to claim 29, the suspension being distributed on a

patient tissue site undergoing tissue grafting.

U.S.S.N.: 10/068,299

Page 3 of 20

35. (Withdrawn) A cell suspension according to claim 29 comprising the further step of:

(d) administering the suspension directly to a region on the patient that requires a cell

graft.

36. (Withdrawn) A cell suspension according to claim 35 wherein the tissue sample is obtained

from the patient that requires a cell graft.

37. (Withdrawn) A cell suspension according to claim 35 wherein the cell suspension is

distributed relatively evenly over the graft region.

38. (Withdrawn) A cell suspension according to claim 35 wherein the cell suspension is

obtained perioperatively.

39. (Withdrawn) A cell suspension according to claim 35 wherein the cell suspension contains

cells present in a ratio to each other comparable to those in the donor sample.

40. (Withdrawn) A cell suspension according to claim 39 wherein the cells include keratinocyte

basal cells, Langerhans cells, fibroblasts and melanocytes.

41. (Withdrawn) A suspension according to claim 40 wherein the cells are substantially viable.

42. (Withdrawn) A cell suspension according to claim 37 wherein the cell suspension is

sprayed, spread, pipetted, or painted onto the tissue site.

43. (Withdrawn) A cell suspension according to claim 35 wherein the cell suspension is

obtained perioperatively from a tissue sample for the patient that requires a cell graft, contains

cells present in a ratio to each other comparable to those seen in the donor sample, and is

sprayed, spread, pipetted, or painted onto the tissue site to provide an even distribution over the

graft region.

U.S.S.N.: 10/068,299

Page 4 of 20

- 44. (Withdrawn) A cell suspension produced according to a method comprising the steps of:
 - (a) obtaining a tissue sample from a site on a donor in need of a tissue graft;
- (b) physically and/or chemically dissociating and removing cellular stratum from cells present in the sample;
 - (c) harvesting the cells in the presence of a nutrient solution;
 - (d) distributing the suspension on a site of the donor as an autologous tissue graft.
- 45. (Withdrawn) A suspension according to claim 44 wherein the suspension is substantially free of cell conglomerates.
- 46. (Withdrawn) A suspension according to claim 44 wherein the suspension is substantially free of xenogenic serum.
- 47. (Withdrawn) A cell suspension according to claim 44 wherein the cell suspension is distributed relatively evenly over the graft region.
- 48. (Withdrawn) A cell suspension according to claim 47 wherein the cell suspension is obtained perioperatively.
- 49. (Withdrawn) A cell suspension according to claim 44 wherein the cell suspension contains cells represent in a ratio to each other comparable to those seen in the donor sample.
- 50. (Withdrawn) A suspension according to claim 49 wherein the cells comprise keratinocyte basal cells, Langerhans cells, fibroblasts and melanocytes.
- 51. (Withdrawn) A suspension according to claim 50 wherein the cells are substantially viable.
- 52. (Withdrawn) A cell suspension according to claim 47 wherein the cell suspension is sprayed, spread, pipetted, or pained on to the tissue site.

U.S.S.N.: 10/068,299

Page 5 of 20

53. (Withdrawn) A cell suspension according to claim 44 wherein the cell suspension is

obtained perioperatively, contains cells present in a ratio to each other comparable to those seen

in the donor sample, and is sprayed, spread, pipetted, or painted onto the tissue site to provide an

even distribution over the graft region.

54. (Withdrawn) A cell suspension produced by a method comprising obtaining cells from a

patient in need of a tissue graft, providing the cells in nutrient solution in a manner that is

substantially free of cellular stratum, xenogenic serum, and cell conglomerates, the suspension

being distributed in apposition to the site of the recipient as a tissue graft.

55. (Withdrawn) A suspension according to claim 54 wherein the suspension is distributed

relatively evenly over the graft region.

56. (Withdrawn) A cell suspension according to claim 54 wherein the cell suspension is

obtained perioperatively.

57. (Withdrawn) A cell suspension according to claim 54 wherein the cell suspension contains

cells present in a ratio to each other comparable to those seen in the donor sample.

58. (Withdrawn) A suspension according to claim 57 wherein the cells comprise keratinocyte

basal cells, Langerhans cells, fibroblasts and melanocytes.

59. (Withdrawn) A suspension according to claim 58 wherein the cells are substantially viable.

60. (Withdrawn) A cell suspension according to claim 55 wherein the cell suspension is sprayed,

spread, pipetted, or painted onto the tissue site.

61. (Currently amended) A cell suspension comprising cells derived harvested from a dermal-

epithelial skin tissue sample obtained from a patient, wherein the skin tissue sample comprises

U.S.S.N.: 10/068,299

Page 6 of 20

dermis, epidermis, and a dermal-epidermal junction therebetween, the cell suspension

comprising:

(a) a composition of viable cells derived harvested from the dermis and the epidermis of

said <u>skin</u> tissue sample and autologous to said patient, said composition having <u>a ratio of a cell</u>

population comprising keratinocyte basal cells, fibroblasts and melanocytes, the cell population

of the composition and the skin tissue sample being comparable that is comparable to a ratio of

keratinocyte basal cells, fibroblasts and melanocytes present in said tissue sample; and

(b) a nutrient solution free of serum xenogenic to the patient,

wherein said cell suspension is free of cellular congregates greater than 200 µm.

62. (Withdrawn) A suspension according to claim 61 wherein the suspension is distributed

relatively evenly over the graft region.

63. (Previously presented) A cell suspension according to claim 61 wherein the cell suspension

is obtained perioperatively.

64. (Canceled)

65. (Currently amended) A suspension according to claim 61 wherein said composition of cells

comprises comprises keratinocyte basal cells, Langerhans cells, fibroblasts and melanocytes.

66. (Canceled)

67. (Withdrawn) A cell suspension according to claim 62, wherein the cell suspension is

sprayed, spread pipetted, or painted onto the tissue site.

68. (Withdrawn) A cell suspension produced by a method sufficient to provide the cells in

nutrient solution, substantially free of cellular stratum, xenogenic serum, and cell conglomerates,

the suspension serving as a graft in apposition to the body of a recipient in need of a tissue graft.

Amendment and Response

Attorney Docket No.: AVT-001 U.S.S.N.: 10/068,299

Page 7 of 20

69. (Withdrawn) A suspension according to claim 68 wherein the suspension is distributed

relatively evenly over the graft region.

70. (Withdrawn) A cell suspension according to claim 69 wherein the cell suspension is

obtained perioperatively.

71. (Withdrawn) A cell suspension according to claim 69 wherein the cell suspension contains

cells present in a ratio to each other comparable to those seen in the donor sample.

72. (Withdrawn) A suspension according to claim 71 wherein the cells comprise keratinocyte

basal cells, Langerhans cells, fibroblasts and melanocytes.

73. (Withdrawn) A suspension according to claim 72 wherein the cells are substantially viable.

74. (Withdrawn) A cell suspension according to claim 69 wherein the cell suspension is

sprayed, spread, pipetted, or painted onto the tissue site.

75. (Currently amended) A cell suspension according to claim 61, further wherein the viable

cells are harvested in a method using a solution comprising an enzyme.

76. (Currently amended) A cell suspension according to claim 75 wherein the enzyme is

selected from the group consisting of trypsin, trypsin-edta trypsin-EDTA, dispase, collagenase,

thermolysin, pronase, hyaluronidase, pancreatin, elastase, and papain.

77. (Previously presented) A cell suspension according to claim 76 wherein the enzyme is

trypsin.

78. (Currently amended) A cell suspension according to claim 77 wherein the trypsin is present

in [[a]] the solution in an amount that is between 5 and 0.1% per volume of the solution.

U.S.S.N.: 10/068,299

Page 8 of 20

79. (Currently amended) A cell suspension according to claim 77 wherein the trypsin is present in [[a]] the solution in an amount that is less than 0.05% per volume of the solution.